HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P. O. Box 272400
Fort Collins, Colorado 80527-2400

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PATENT APPLICATION

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IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Henry F. Lada et al.

Confirmation No.:

Application No.: 09/722,890

Examiner: Vu, Trusha U.

Filing Date: 11/27/2000

Group Art Unit: 2189

Title: HANDHELD OPTION PACK IDENTIFICATION SCHEME

Mail Stop Appeal Brief-Patents
Commissioner For Patents
PO Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Sir:

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on April 7, 2005.

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) $500.00.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

( ) (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d) for the total number of months checked below:

( )	one month	$120.00
( )	two months	$450.00
( )	three months	$1020.00
( )	four months	$1590.00

( ) The extension fee has already been filled in this application.

(X) (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account **08-2025** the sum of **$500.00**. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. A duplicate copy of this sheet is enclosed.

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Respectfully submitted,

Henry F. Lada et al.

By _____

Robert A. Manware

Attorney/Agent for Applicant(s)
Reg. No. **48,758**

Date: **June 7, 2005**

Telephone No.: **(281) 970-4545**

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Henry F. Lada, et al.	§	Group Art Unit:	2189
Serial No.: 09/722,890	§	Examiner:	Vu, Trisha U.
Filed: November 27, 2000	§		
For: HANDHELD OPTION PACK IDENTIFICATION SCHEME	§	Atty Docket:	200301795-1 COMP:0130/FLE

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June 7, 2005
Date

Robert A. Manware

Sir:

APPEAL BRIEF PURSUANT TO 37 C.F.R. §§ 41.31 AND 41.37

This Appeal Brief is being filed in furtherance of the Notice of Appeal mailed on April 4, 2005, and received by the Patent Office on April 7, 2005.

The Commissioner is authorized to charge the requisite fee of $500.00, and any additional fees which may be necessary to advance prosecution of the present application, to Account No. 08-0892, Order No. 200301795-1/FLE (COMP:0130).

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1. REAL PARTY IN INTEREST

The real party in interest is Hewlett-Packard Development Company, LP (hereinafter "HPDC"), the assignee of record in this application.

2. RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any other appeals or interferences related to this Appeal. The undersigned is Appellants' legal representative in this Appeal. HPDC, the Assignee of the above-referenced application, as evidenced by the documents mentioned above, will be directly affected by the Board's decision in the pending appeal.

3. STATUS OF CLAIMS

Claims 1-31 are currently pending and under final rejection and, thus, are the subject of this appeal.

4. STATUS OF AMENDMENTS

Appellants have not submitted any amendments subsequent to the Final Office Action mailed on January 31, 2005.

5. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates generally to a personal digital assistant (PDA) having a main unit and an option pack. The option pack includes one or more applications, as well as drivers associated with the one or more applications. The software applications and software drivers are stored on the option pack to conserve memory on the main unit and to eliminate the process of downloading software from the Internet or a CDROM. Page 7, lines 11-14. Once an option pack is inserted into the main unit and the option pack is identified, the main unit determines

whether it has enough battery life to power the option pack and determines whether it has enough memory space to download the applications and drivers from the option pack to the main unit. Page 26, lines 5-8; page 26, lines 14-16; page 27, lines 4-8. Once the main unit obtains the information on the drivers and applications, and determines that it has enough battery life and memory to accommodate the applications and drivers, the applications and drivers are downloaded from the option pack to the main unit. Page 27, lines 8-16.

With regard to the aspect of the invention set forth in independent claim 1, discussions of the recited features of claim 1 can be found at least in the locations in the specification and drawings cited below. By way of example, an embodiment in accordance with the present invention relates to a method of implementing a personal digital assistant (e.g., 5) comprising a main unit (e.g., 10) and an option pack (e.g., 12). *See e.g.*, Figs. 1A-1D; page 7, line 16 – page 9, line 8. The method comprises coupling the option pack with the main unit. *See e.g.*, Fig. 1D; page 8, line 6-13. The option pack comprises a first memory device (e.g., 90) configured to store one or more applications, as well as drivers associated with the one or more applications, and a second memory device configured to store identification data (e.g., 104). *See e.g.*, Figs. 3-5. The main unit comprises a device manager (e.g., 66) configured to receive the identification data from the second memory device, a power supply (e.g., 72), and a third memory device (e.g., 63). *See e.g.*, Figs. 2, 4 and 5. The method further comprises transmitting the identification data from the second memory device to the device manager. *See e.g.*, page 25, line 4 – 26, line 12. The method also comprises downloading the one or more applications, as well as drivers associated with the one or more applications, from the option pack to the main unit. *See e.g.*, page 6, line 23 – page 7, line 14.

With regard to the aspect of the invention set forth in independent claim 17, discussions of the recited features of claim 17 can be found at least in the locations in the specification and

drawings cited below. By way of example, an embodiment in accordance with the present invention relates to a method of interfacing an option pack (e.g., 12) with a main unit (e.g., 10) of a personal digital assistant (PDA) (e.g., 5). *See e.g.*, Figs. 1A-1D; page 7, line 16 – page 9, line 8. The method comprises determining whether there is an option pack coupled to the main unit (e.g., block 124). *See e.g.*, Fig. 6; page 25, lines 20-21. The method further comprises providing an interrupt signal from the option pack to the main unit. *See e.g.*, Fig. 6; page 25, line 21 – page 26, line 14. The method further comprises interrupting the processing of the main unit. *See e.g.*, Fig. 6; page 25, line 21 – page 26, line 14. The method further comprises notifying the main unit that the option pack is present. *See e.g.*, Fig. 6; page 25, line 21 – page 26, line 14. The method further comprises transmitting identification information from the option pack to the main unit. *See e.g.*, Fig. 6; page 25, line 21 – page 26, line 14. Finally, the method further comprises copying one or more applications, as well as drivers associated with the one or more applications, from the option pack to the main unit (e.g., 140). *See e.g.*, Fig. 6; page 27, lines 9-19.

With regard to the aspect of the invention set forth in independent claim 17, discussions of the recited features of claim 17 can be found at least in the locations in the specification and drawings cited below. By way of example, an embodiment in accordance with the present invention relates to an option pack interface (e.g., 12a). *See e.g.*, Fig. 3; page 11, lines 10-20. The option pack interface comprises a memory device comprising a memory data structure configured to store identification data. *See e.g.*, Table 7; pages 29-36. The option pack interface further comprises at least one data sector defined within the memory data structure, wherein the at least one data sector comprises one or more applications, as well as drivers associated with the one or more applications, and wherein the one or more applications and drivers are configured to be downloaded from the memory device to a main unit. *See e.g.*, Table 7; page 25, line 4 – 26, line 12; page 6, line 23 – page 7, line 14; pages 29-36.

6. **GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

First Ground of Rejection for Review on Appeal:

Appellants respectfully urge the Board to review and reverse the Examiner's first ground of rejection in which the Examiner rejected claims 1, 3-8, 11 and 24-28 under 35 U.S.C. § 102(e) as being anticipated by Harari et al. (U.S. Pat. No. 6,266,724).

Second Ground of Rejection for Review on Appeal:

Appellants respectfully urge the Board to review and reverse the Examiner's second ground of rejection in which the Examiner rejected claim 2 under 35 U.S.C. § 103(a) as being unpatentable over Harari et al. (U.S. Pat. No. 6,266,724) in view of Bailey et al. (U.S. Pat. No. 6,134,612).

Third Ground of Rejection for Review on Appeal:

Appellants respectfully urge the Board to review and reverse the Examiner's third ground of rejection in which the Examiner rejected claims 9 and 30 under 35 U.S.C. § 103(a) as being unpatentable over Harari et al. (U.S. Pat. No. 6,266,724) in view of Garney (U.S. Pat. No. 5,538,436).

Fourth Ground of Rejection for Review on Appeal:

Appellants respectfully urge the Board to review and reverse the Examiner's fourth ground of rejection in which the Examiner rejected claims 12-14 under 35 U.S.C. § 103(a) as being unpatentable over Harari et al. (U.S. Pat. No. 6,266,724) in view of Miller (U.S. Pat. No. 6,199,168).

Fifth Ground of Rejection for Review on Appeal:

Appellants respectfully urge the Board to review and reverse the Examiner's fifth ground of rejection in which the Examiner rejected claim 15 under 35 U.S.C. § 103(a) as being unpatentable over Harari et al. (U.S. Pat. No. 6,266,724) in view of Kane et al. (U.S. Pat. No. 5,652,832).

Sixth Ground of Rejection for Review on Appeal:

Appellants respectfully urge the Board to review and reverse the Examiner's sixth ground of rejection in which the Examiner rejected claims 10, 16, 29 and 31 under 35 U.S.C. § 103(a) as being unpatentable over Harari et al. (U.S. Pat. No. 6,266,724) in view of Petty (U.S. Pat. No. 6,369,486).

Seventh Ground of Rejection for Review on Appeal:

Appellants respectfully urge the Board to review and reverse the Examiner's seventh ground of rejection in which the Examiner rejected claims 17 and 22 under 35 U.S.C. § 103(a) as being unpatentable over Postman et al. (U.S. Pat. No. 5,664,231) in view of Harari et al. (U.S. Pat. No. 6,266,724).

Eighth Ground of Rejection for Review on Appeal:

Appellants respectfully urge the Board to review and reverse the Examiner's eighth ground of rejection in which the Examiner rejected claims 18 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Postman et al. (U.S. Pat. No. 5,664,231) in view of Harari et al. (U.S. Pat. No. 6,266,724) and further in view of De Nicola (U.S. Pat. No. 6,308,240).

Ninth Ground of Rejection for Review on Appeal:

Appellants respectfully urge the Board to review and reverse the Examiner's ninth ground of rejection in which the Examiner rejected claims 20 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Postman et al. (U.S. Pat. No. 5,664,231) in view of Harari et al. (U.S. Pat. No. 6,266,724) and further in view of Kane (U.S. Pat. No. 5,652,832).

Tenth Ground of Rejection for Review on Appeal:

Appellants respectfully urge the Board to review and reverse the Examiner's tenth ground of rejection in which the Examiner rejected claim 23 under 35 U.S.C. § 103(a) as being unpatentable over Postman et al. (U.S. Pat. No. 5,664,231) in view of Harari et al. (U.S. Pat. No. 6,266,724) and further in view of Cepulis (U.S. Pat. No. 5,664,231).

7. ARGUMENT

As discussed in detail below, the Examiner has improperly rejected the pending claims. Further, the Examiner has misapplied long-standing and binding legal precedents and principles in rejecting the claims under Sections 102 and 103. Accordingly, Appellants respectfully request full and favorable consideration by the Board, as Appellants strongly believe that claims 1-31 are currently in condition for allowance.

A. First Ground of Rejection:

The Examiner rejected claims 1, 3-8, 11 and 24-28 under 35 U.S.C. § 102(e) as being anticipated by Harari et al. (US 6,266,724). Each of the independent claims will be discussed separately below. Appellants respectfully traverse this rejection.

1. **Judicial precedent has clearly established a legal standard for a prima facie anticipation rejection.**

Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 227 U.S.P.Q. 773 (Fed. Cir. 1985). Thus, for a prior art reference to anticipate under Section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). Moreover, the prior art reference also must show the *identical* invention "*in as complete detail as contained in the ... claim*" to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989) (emphasis added). Accordingly, Appellants need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter.

2. **The Examiner's rejection of independent claims 1 and 24 is improper because the rejection fails to establish a prima facie case of anticipation.**

Independent claim 1 recites:

> A method of implementing a personal digital assistant comprising a main unit and an option pack comprising the acts of:
> (a) coupling the option pack with the main unit, the option pack comprising a first memory device configured to store one or more applications, as well as drivers associated with the one or more applications, and a second memory device configured to store identification data, the main unit comprising a device manager configured to receive the identification data from the second memory device, a power supply, and a third memory device;
> (b) transmitting the identification data from the second memory device to the device manager; and
> (c) downloading the one or more applications, as well as drivers associated with the one or more applications, from the option pack to the main unit.

Independent claim 24 recites:

> An option pack interface comprising:

a memory device comprising a memory data structure configured to store identification data; and

at least one data sector defined within the memory data structure, wherein the at least one data sector comprises one or more applications, as well as drivers associated with the one or more applications, and wherein the one or more applications and drivers are configured to be downloaded from the memory device to a main unit.

In rejecting independent claims 1 and 24, the Examiner asserted that the Harari reference discloses all of the recited features of the claim. *See* Official Action mailed January 31, 2005. Appellants respectfully traverse this assertion.

With regard to the independent claims, the Examiner stated:

> As to claim 1, Harari teaches a method of implementing a personal digital assistant comprising a main unit (host system 200 and/or mother card 10) and an option pack (daughter card 20) (Fig. 1) comprising the acts of: (a) coupling the option pack with the main unit (Fig. 1), the option pack comprising a first memory device (memory in the daughter card) configured to store one or more applications and drivers associated with the one or more applications (col. 10. lines 37-47 and col. 13, lines 10-20), and a second memory device (part of the memory in the daughter card) configured to store identification data (configuration and device specific information) (col. 8, lines 51-55), the main unit comprising a device manager (comprehensive controller) configured to receive the identification data from the second memory device (col. 8, lines 38-55), a power supply (col. 7, lines 55-61), and a third memory device (ROM 52) (col. 7, lines 46-61); (b) transmitting the identification data from the second memory device to the device manager (col. 8, lines 51-55); and (c) downloading the one or more applications, as well as drivers associated with the one or more applications, form the option pack to the main unit (col. 10, lines 37-47 and col. 13, lines 10-20).
>
> As to claim 24, Harari teaches an option pack interface comprising: a memory device (memory in the daughter card) comprising a memory data structure configured to store identification data (configuration and device specific information) (col. 8, lines 51-55), and at least one data sector defined within the memory data structure (part of the memory in the daughter card), wherein the at least one data sector comprises one or more applications, as well as drivers associated with the one or more

> applications (col. 10, lines 37-47 and col. 13, lines 10-20), and wherein the one or more applications and drivers are configured to be downloaded from the memory device to a main unit (col. 10, lines 37-47 and col. 13, lines 10-20).

Further, in the Advisory Action mailed on January 26, 2004, the Examiner stated:

> With respect to Applicant's argument regarding claims 1 and 24 on page 11 of the Remarks that "the applications and drivers *are not downloaded* to the mother card 10. As clearly stated in the Harari reference, any applications and/or drivers *are simply read* or made accessible by the mother board", it is noted that the mother card has the intelligence to move/copy blocks of files (software, microcode, or data) into and out of the daughter card (col. 9, lines 15-27 and col. 10, lines 48-52), therefore, applications/drivers on the daughter card are downloaded to the mother card. Harari also discloses configuration and device specific information (such as format and file structure)(driver) stored in the daughter card can be downloaded into the mother card to customize it for appropriate operation (col. 8, lines 51-55). Thus the rejection is proper.

Appellants respectfully traverse the Examiner's assertions made in the Final Office Action, as well as the advisory action, for at least two reasons. First, the Examiner asserted that one skilled in the art would correlate the mother card 10 and the daughter card 20 with the main unit and the option pack of the presently recited personal digital assistant (PDA). However, as discussed further below, in support of this assertion, the Examiner selected aspects of different and mutually exclusive embodiments disclosed in the Harari reference. As such, the Examiner's assertion is not supported by the Harari reference. Second, the Examiner asserted that the Harari reference discloses downloading applications and drivers from the daughter card 20 to the mother card 10. However, even if the mother card 10 and the daughter card 20 could be fairly correlated with the recited main unit and option pack, the Harari reference *does not* disclose downloading applications and drivers from the option pack to the main unit, as discussed further below.

Claim 1 recites a method comprising "downloading the one or more applications, as well as drivers associated with the one or more applications from the option pack to the main unit." Claim 24 recites an option pack interface having at least one data sector, "wherein the at least one data sector comprises one or more applications, as well as drivers associated with the one or more applications, and wherein the one or more applications and drivers are configured to be downloaded from the memory device to a main unit."

In contrast to the presently recited subject matter, the Harari reference discloses a system for implementing mass storage peripherals, such as electrically erasable programmable read-only-memories (EEPROM) or flash EEPROMs. Col. 1, lines 20-22. The Harari reference discloses a memory card being made up of a mother card portion and a daughter card portion. Col. 6, lines 56-58. More specifically, a peripheral card having a PC card form factor and removably coupled externally to a host system is further partitioned into a mother card and a daughter card. Abstract. The daughter card is removably coupled to the mother card. Abstract. As disclosed in the Harari reference, the system memory originally residing in a host system may be relocated to the mother card/ daughter card to free space on the host system motherboard. Col. 4, lines 34-41. The mother card/ daughter card combination contains all of the memory requirements for the host system. Col. 4, lines 52-54. This provides a single memory card which includes a hybrid of main memory (DRAM or SRAM as well as ROM or flash) 60 on the mother card 10 and mass storage memory (hard disk or flash EEPROM, or floppy disk) on the daughter card 20. Col. 9, lines 8-14.

With regard to the first point of error, throughout the Office Action, the Examiner correlated the mother card 10 and the daughter card 20 of Harari with the presently recited main unit and option pack, respectively. The passages cited by the Examiner generally refer to a memory card 100 comprising a daughter card 20 coupled to a mother card 10. The Examiner cited various

functions described in the Harari reference with regard to the mother card 10 in correlating the presently recited main unit in rejecting the present claims.

During prosecution, Appellants asserted that one skilled in the art would not correlate the daughter card 20 and mother card 10 (which may be combined to form a memory card 100 for use in a computer system) with the recited option pack and main unit of a personal digital assistant. In response to Appellant's assertion the Examiner directed Appellant's to col. 12, lines 43-47 of the Harari reference. Appellants respectfully respond by noting that while the cited passage does indeed mention a personal digital assistant (PDA), the embodiment illustrated in the cited passage provides a daughter card 20 which may be coupled directly to a host system 200' and that this embodiment does not even include the mother card 10. *See* Fig. 9; col. 12, lines 25-55. The Harari reference explicitly states that the *host system* (not the mother card) may be a PDA. It would appear that the Examiner is changing the rejection. As discussed above, the other cited passages used by the Examiner in support of his rejection correlate the recited main unit/ option pack with the mother card 10/ daughter card 20. Accordingly, the supporting material cited by the Examiner is directed to the functionality and implementation of the mother card 10. As such, the Examiner's citation of the Harari embodiment of coupling a daughter card 20 directly to a host system 200' (which may comprise a PDA), is of little consequence.

If the Examiner means to assert that the host system disclosed in Harari correlates with the main unit recited in the present claims, the Examiner's other assertions and citations directed to the correlation of the mother card 10 to the main unit recited in the present claims, are moot. Appellants maintain the position that one skilled in the art would not correlate the daughter card 20 and mother card 10 which may be combined to form a memory card 100 for use in a computer system with the recited option pack and main unit of a personal digital assistant. Appellants further

assert that the Examiner's citation to the embodiment disclosed in Fig. 9 of the Harari reference provides no support for the contention that the *mother card* would be correlated with the main unit of a PDA by one of ordinary skill in the art.

Even if one skilled in the art would correlate the recited option pack and main unit with the daughter card 20 and mother card 10 disclosed in the Harari reference, the Harari reference does not disclose each of the features additionally recited in claims 1 and 24. With regard to the second point of error, in the Final Office Action, the Examiner cited col. 10, lines 37-47 and col. 13, lines 10-20 as disclosing the act of downloading one or more applications, as well as drivers associated with the one or more applications, from the option pack to the main unit, as recited in claim 1. Similarly, the Examiner cited the same passages in support of his assertion that Harari teaches an option pack interface wherein one or more applications and drivers are configured to be downloaded from a memory device on the option pack to the main unit, as recited in claim 24. Further, in the Advisory Action, the Examiner cited col. 9, lines 15-27 and col. 10, lines 48-52 in noting that "the mother card has the intelligence to move/copy blocks of files (software, microcode, or data) into and out of the daughter card," and concluded that "therefore, applications/drivers on the daughter card are downloaded to the mother card." Further, the Examiner cited col. 8, lines 51-55 in stating that "Harari also discloses configuration and device specific information (such as format and file structure)(driver) stored in the daughter card can be downloaded into the mother card to customize it for operation." Appellants respectfully traverse these assertions.

In response to Appellants' argument that the Harari reference simply teaches *reading* information from the daughter card, rather than *downloading* applications and drivers from an option pack to a main unit, as recited in the present claims, the Examiner also cited definitions of "reading" and "downloading" from "The Authoritative Dictionary of IEEE Standard Terms" and

"Computer Dictionary." The Examiner continues to maintain that "reading" and "downloading" are synonymous. Appellants respectfully traverse these assertions.

The first passage discloses a controller on the mother card 10 which is configured to *read* and write to the daughter card 20. Col. 10, lines 43-45. The controller on the mother card 10 may, for example, read different application programs on the daughter card 20. Col. 10, lines 45-47. The second passage discloses storing a key or algorithm on the daughter card 20 wherein the key is used to recover data stored on the daughter card 20. Col. 13, lines 10-15. When the daughter card 20 is relocated from one host to another, the decoding information is available on the daughter card 20.

While these passages may disclose *reading* application programs from a daughter card 20 and the *availability* of a decoding key or decoding algorithm on the daughter card 20, nothing in the Harari reference discloses *downloading* one or more applications and drivers associated with those applications from an option pack to a main unit as recited in the present claims. Appellants assert that even if the mother card 10 is capable of reading different application programs on the daughter card 20 or accessing drivers on the daughter card 20, the applications and drivers are *not* downloaded to the mother card 10. As clearly stated in the Harari reference, any applications and/or drivers are simply read or made accessible by the mother board. Even if one were to adopt the definitions provided by the Examiner, there is absolutely no suggestion in the Harari reference that *applications and drivers* from the daughter card are *copied* or *transferred* from the daughter card to the mother card. Reading *data or information* from an application on the daughter card is *not* analogous to copying downloading the *application* itself, *along with the drivers associated with that application*, onto the mother card. Harari does not disclose or suggest downloading applications and drivers, as recited in the present claims.

The passages additionally cited by the Examiner in the Advisory Action provide no further support for the Examiner's assertion. The cited passages refer to a memory card 100 comprising a daughter card 20 coupled to a mother card 10. "This provides a single memory card which includes a hybrid of main memory (DRAM or SRAM as well as ROM or flash) 60 on the mother card 10 and mass storage memory (hard disk or flash EEPROM, or floppy disk) on the daughter card 20." Col. 9, lines 9-11. The embodiment described in Figs. 6 – 8 of the Harari reference are directed to the daughter card 20 being a disk/flash/floppy media card, such as a flash EEPROM card. Col. 9, lines 15-27 and col. 10, lines 48-52, each cited by the Examiner in the Advisory Action, disclose moving blocks of files between the two memory cards (the daughter card 20 and the mother card 10). Appellants respectfully assert that moving *data files* between the daughter card 20 and the mother card 10 *cannot* be fairly characterized as *downloading applications* and *drivers* from an option pack to a main unit, as recited in the present claims. In the context of the cited embodiments of the daughter card 20 and mother card 10 as memory cards cited, downloading applications and drivers from the daughter card 20 to the mother card 10 does not make sense.

Further, in the Advisory Action, the Examiner cited the col. 8, lines 51-55 of the Harari reference as disclosing the downloading of drivers. Appellants respectfully traverse this characterization, as well. The cited passage discloses downloading configuration and device specific information (such as format and file structure) from the daughter card to the mother card. Appellants assert that downloading configuration information is in no way correlative to downloading drivers. As discussed further below, those skilled in the art would understand that a "driver" refers to the program that controls a device. www.webopedia.com. Downloading configuration and device specific information does not imply downloading a device driver.

Claim 1 recites an option pack comprising "a first memory device configured to store one or more applications, as well as drivers associated with the one or more applications," and "a second memory device configured to store identification information." Clearly, the applications and drivers are separate from the recited identification information, since the applications and drivers are stored in a different memory device than the identification information. In the Final Office Action, the Examiner cited col. 8, lines 51-55 of the Harari reference and correlated the device specific information of Harari with the "identification information" recited in claim 1. However, as noted above, in the Advisory Action, the Examiner cited the same device specific information of Harari as correlating with the "drivers" recited in claim 1. Appellants respectfully assert that the downloading of the device specific information disclosed in Harari does not provide any support for the contention that the Harari reference discloses downloading applications and drivers. Those skilled in the art would not understand the downloading of configuration and device specific information as downloading drivers. Indeed, until the Advisory Action, the Examiner did not make this correlation, either. Appellants respectfully submit that this assertion simply has no merit.

For at least the reasons discussed above, Appellants respectfully assert that the Harari reference does not disclose every element recited in the present claims and therefore cannot possibly anticipate the recited subject matter. Therefore, Appellants respectfully request that the Board find claims 1, 3-8, 11 and 24-28 are patentable over the prior art of record and reverse the Examiner's rejection of those claims.

B. **Second Ground of Rejection:**

The Examiner rejected claim 2 under 35 U.S.C. § 103(a) as being unpatentable over Harari et al. (US 6,266,724), as applied to claim 1 above and further in view of Bailey et al.

(US 6,134,612). Appellants respectfully traverse this rejection.

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (B.P.A.I. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes all of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988).

Claim 2 is dependent on claim 1. The Examiner only relied on the Bailey reference as disclosing a 100-pin connector. Appellants note that the Bailey reference does nothing to cure the deficiencies of the Harari reference, as discussed above with respect to Issue No. 1. Accordingly, neither of the references, either alone or in combination, discloses all of the elements recited in claim 2 and thus, cannot possibly render the recited subject matter obvious. Therefore, Appellants respectfully request that the Board find claim 2 patentable over the prior art of record and reverse the Examiner's rejection of this claim for the reasons discussed above with regard to claim 1.

C. **Third Ground of Rejection:**

The Examiner rejected claims 9 and 30 under 35 U.S.C. § 103(a) as being unpatentable over Harari et al. (US 6,266,724) and further in view of Garney (US 5,538,436). Appellants respectfully traverse this rejection.

Claim 9 is dependent on claim 1 and claim 30 is dependent on claim 24. The Examiner only relied on the Garney reference as disclosing identification information comprising a bootstrap program. Appellants note that the Garney reference does nothing to cure the deficiencies of the Harari reference, as discussed above with respect to Issue No. 1. Accordingly, neither of the references, either alone or in combination, discloses all of the elements recited in claims 9 and 30 and thus, cannot possibly render the recited subject matter obvious. Therefore, Appellants respectfully request that the Board find claims 9 and 30 patentable over the prior art of record and reverse the Examiner's rejection of these claims for the reasons discussed above with regard to claims 1 and 24.

D. **Fourth Ground of Rejection:**

The Examiner rejected claims 12-14 under 35 U.S.C. § 103(a) as being unpatentable over Harari et al. (US 6,266,724) and further in view of Miller (US 6,199,168). Appellants respectfully traverse this rejection.

The Examiner only relied on the Miller reference as disclosing a minimal current draw upon insertion of an option pack into a main unit and determining whether the main unit has enough power to fully activate the option pack. Appellants note that the Miller reference does nothing to cure the deficiencies of the Harari reference, as discussed above with respect to

Issue No. 1. Accordingly, neither of the references, either alone or in combination, discloses all of the elements recited in claims 12-14 and thus, cannot possibly render the recited subject matter obvious. Therefore, Appellants respectfully request that the Board find claims 12-14 patentable over the prior art of record and reverse the Examiner's rejection of these claims for the reasons discussed above with regard to claim 1.

E. **Fifth Ground of Rejection:**

The Examiner rejected claim 15 under 35 U.S.C. § 103(a) as being unpatentable over Harari et al. (US 6,266,724) as applied to claim 1 above and further in view of Kane et al. (US 5,652,832). Appellants respectfully traverse this rejection.

Claim 15 is dependent on claim 1. The Examiner only relied on the Kane reference as disclosing checking whether there is enough memory allocated in the main unit in order to recognize and configure the option pack. Appellants note that the Kane reference does nothing to cure the deficiencies of the Harari reference, as discussed above with respect to Issue No. 1. Accordingly, neither of the references, either alone or in combination, discloses all of the elements recited in claim 15 and thus, cannot possibly render the recited subject matter obvious. Therefore, Appellants respectfully request that the Board find claim 15 patentable over the prior art of record and reverse the Examiner's rejection of this claim for the reasons discussed above with regard to claim 1.

F. **Sixth Ground of Rejection:**

The Examiner rejected claims 10, 16, 29 and 31 under 35 U.S.C. § 103(a) as being unpatentable over Harari et al. (US 6,266,724) and further in view of Petty (US 6,389,486). Appellants respectfully traverse this rejection.

Claims 10 and 16 are dependent on claim 1 and claims 29 and 31 are dependent on claim 24. Appellants note that the Petty reference does nothing to cure the deficiencies of the Harari reference, as discussed above with respect to Issue No. 1. Accordingly, neither of the references, either alone or in combination, discloses all of the elements recited in claims 10, 16, 29 and 31 and thus, cannot possibly render the recited subject matter obvious. Therefore, Appellants respectfully request that the Board find claims 10, 16, 29 and 31 patentable over the prior art of record and reverse the Examiner's rejection of these claims for the reasons discussed above with regard to claim 1 and 24.

G. **Seventh Ground of Rejection:**

The Examiner rejected claims 17 and 22 under 35 U.S.C. § 103(a) as being unpatentable over Postman et al. (5,664,231) in view of Harari et al. (US 6,266,724). Appellants respectfully traverse this rejection.

1. **Judicial precedent has clearly established a legal standard for a prima facie obviousness rejection.**

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (B.P.A.I. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes all of the claimed elements, but also a convincing line of reason as to why

one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985).

2. **The Examiner's rejection of independent claim 17 is improper because the rejection fails to establish a prima facie case of obviousness.**

Independent claim 17 recites:

> A method of interfacing an option pack with a main unit of a personal digital assistant (PDA), comprising the acts of:
> (a) determining whether there is an option pack coupled to the main unit;
> (b) providing an interrupt signal from the option pack to the main unit;
> (c) interrupting the processing of the main unit;
> (d) notifying the main unit that the option pack is present; and
> (e) transmitting identification information from the option pack to the main unit and;
> (f) copying one or more applications, as well as drivers associated with the one or more applications, from the option pack to the main unit.

In rejecting independent claim 17, the Examiner asserted that the Harari reference discloses all of the recited features of the claim. *See* Official Action mailed January 31, 2005. Appellants respectfully traverse this assertion.

Specifically with regard to independent claim 17, the Examiner stated:

> As to claim 17, Postman teaches a method of interfacing an option pack (PC card) with a min unit of a personal digital assistant (PDA), comprising the acts of: (a) determining whether there is an option pack coupled to the main unit (automatically apply power to the input device when the PC Card is inserted) (col. 26, lines 48-48-50); (b) providing an interrupt signal from the option pack to the main unit; (c) interrupting the processing of the main unit; (d) notifying the main unit that the option pack is present (col. 26, lines 50-54 and col. 7, lines 1-5); and (e) transmitting identification

> information (Configuration Option/Card Configuration Status Register) from the option pack to the main unit (col. 8, lines 43-54). However, Postman does not explicitly disclose copying one or more applications, as well as drivers associated with the one or more applications, from the option pack to the main unit. Harari teaches option pack having applications and drivers associated with the applications, and teaches copying the applications and drivers from the option pack to the main unit (col. 10, lines 37-47 and col. 13, lines 10-20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement including applications and drivers associated with the applications in the option pack, and copying the applications and drivers from the option pack to the main unit as taught by Harari in the system of Postman to add different specific functions (programs) to the system at any time.

Claim 17 recites "copying one or more applications, as well as drivers associated with the one or more applications, from the option pack to the main unit." The Examiner cited the Harari reference as disclosing the aforementioned features. As discussed above with regard to independent claims 1 and 24, the Harari reference does not disclose downloading or copying applications and drivers from an option pack to a main unit. The Postman reference simply discloses a PCMCIA card which is not configured to store one or more applications and associated drivers. Accordingly, the Postman reference does not cure the deficiencies of the Harari reference. Because neither of the references either alone or in combination discloses each of the elements recited in the present claims, the references cannot possibly render the claimed subject matter obvious. Therefore, Appellants respectfully request that the Board find claims 17 and 22 patentable over the prior art of record and reverse the Examiner's rejection of these claims for the reasons discussed above with regard to claims 1 and 24.

H. **Eighth Ground of Rejection:**

The Examiner rejected claims 18 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Postman in view of Harari et al. (US 6,266,724) as applied to claim 17 above, and further in view of De Nicola (US 6,308,240). Appellants respectfully traverse this rejection.

. Claims 18 and 19 are dependent on claim 17. The Examiner only relied on the De Nicola reference as disclosing determining whether the main unit has enough power to enable the option pack. Appellants note that the De Nicola reference does nothing to cure the deficiencies of the Harari and Postman references, as discussed above with respect to Issues No. 1 and 7. Accordingly, none of the references, either alone or in combination, discloses all of the elements recited in claims 18 and 19 and thus, cannot possibly render the recited subject matter obvious. Therefore, Appellants respectfully request that the Board find claims 18 and 19 patentable over the prior art of record and reverse the Examiner's rejection of these claim for the reasons discussed above with regard to claim 17.

I. **Ninth Ground of Rejection:**

The Examiner rejected claims 20 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Postman in view of Harari et al. (US 6,266,724) as applied to claim 17 above, and further in view of Kane (US 5,652,832). Appellants respectfully traverse this rejection.

Claims 18 and 19 are dependent on claim 17. The Examiner only relied on the Kane reference as disclosing checking whether there is enough memory allocated in the main unit in

order to recognize and configure the option pack. Appellants note that the Kane reference does nothing to cure the deficiencies of the Harari and Postman references, as discussed above with respect to Issues No. 1 and 7. Accordingly, none of the references, either alone or in combination, discloses all of the elements recited in claims 20 and 21 and thus, cannot possibly render the recited subject matter obvious. Therefore, Appellants respectfully request that the Board find claims 20 and 21 patentable over the prior art of record and reverse the Examiner's rejection of these claims for the reasons discussed above with regard to claim 17.

J. **Tenth Ground of Rejection:**

The Examiner rejected claim 23 under 35 U.S.C. § 103(a) as being unpatentable over Postman in view of Harari et al. (US 6,266,724) as applied to claim 22 above, and further in view of Cepulis (US 6,055,596). Appellants respectfully traverse this rejection.

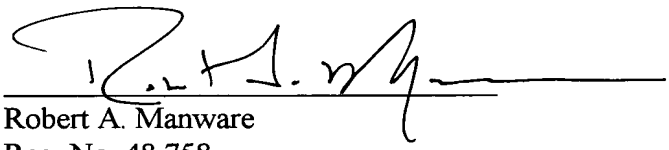
Claims 23 is dependent on claim 17. The Examiner only relied on the Cepulis reference as disclosing initiating a timer to debounce a signal. Appellants note that the Cepulis reference does nothing to cure the deficiencies of the Harari and Postman references, as discussed above with respect to Issues No. 1 and 7. Accordingly, none of the references, either alone or in combination, discloses all of the elements recited in claim 23 and thus, cannot possibly render the recited subject matter obvious. Therefore, Appellants respectfully request that the Board find claim 23 patentable over the prior art of record and reverse the Examiner's rejection of this claim for the reasons discussed above with regard to claim 17.

Conclusion

Appellants respectfully submit that all pending claims are in condition for allowance. However, if the Examiner or Board wishes to resolve any other issues by way of a telephone conference, the Examiner or Board is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

Date: June 7, 2005



Robert A. Manware
Reg. No. 48,758
(281) 970-4545

10. **APPENDIX OF CLAIMS ON APPEAL**

1. A method of implementing a personal digital assistant comprising a main unit and an option pack comprising the acts of:

(a) coupling the option pack with the main unit,

the option pack comprising a first memory device configured to store one or more applications, as well as drivers associated with the one or more applications, and a second memory device configured to store identification data,

the main unit comprising a device manager configured to receive the identification data from the second memory device, a power supply, and a third memory device;

(b) transmitting the identification data from the second memory device to the device manager; and

(c) downloading the one or more applications, as well as drivers associated with the one or more applications, from the option pack to the main unit.

2. The method of implementing a personal digital assistant, as set forth in claim 1, wherein act (a) comprises coupling the option pack with the main unit via a 100-pin connector.

3. The method of implementing a personal digital assistant, as set forth in claim 1, wherein the first memory device and the second memory device comprise the same memory device.

4. The method of implementing a personal digital assistant, as set forth in claim 1, wherein the device manager comprises a device driver that controls the interaction between the main unit and the option pack.

5. The method of implementing a personal digital assistant, as set forth in claim 1, wherein the first memory device comprises a flash memory or a read only memory (ROM).

6. The method of implementing a personal digital assistant, as set forth in claim 1, wherein the second memory device comprises an electrically erasable programmable read only memory (EEPROM).

7. The method of implementing a personal digital assistant, as set forth in claim 1, wherein the identification data comprises option pack feature information, option pack configuration, and option pack identification.

8. The method of implementing a personal digital assistant, as set forth in claim 1, wherein the identification data comprises option pack identification information, control information, a driver table, and option pack configuration.

9. The method of implementing a personal digital assistant, as set forth in claim 1, wherein the identification information comprises a bootstrap program.

10. The method of implementing a personal digital assistant, as set forth in claim 1, wherein the identification information comprises original equipment manufacturer (OEM) information.

11. The method of implementing a personal digital assistant, as set forth in claim 1, wherein act (b) comprises the act of transmitting the identification data through a serial interface.

12. The method of implementing a personal digital assistant, as set forth in claim 11, wherein act (b) comprises the acts of:

(a) enabling the serial interface;

(b) enabling the power supply to transmit power to the option pack; and

(c) transmitting the identification data from the second memory device to the device manager wherein the option pack only draws a minimal amount of current from the main unit.

13. The method of implementing a personal digital assistant, as set forth in claim 12, wherein act (c) comprises the act of transmitting the identification data wherein the option pack draws 5.0 mA – 15.0 mA of current from the main unit.

14. The method of implementing a personal digital assistant, as set forth in claim 1, comprising the act of determining whether the power supply in the main unit has enough power to activate the option pack fully.

15. The method of implementing a personal digital assistant, as set forth in claim 1, comprising the act of determining whether the third memory device on the main unit has enough memory capacity to receive the applications and associated drivers stored on the second memory device of the option pack.

16. The method of implementing a personal digital assistant, as set forth in claim 1, wherein the second memory comprises location and identification information of the applications and drivers available on the option pack.

17. A method of interfacing an option pack with a main unit of a personal digital assistant (PDA), comprising the acts of:

(a) determining whether there is an option pack coupled to the main unit;

(b) providing an interrupt signal from the option pack to the main unit;

(c) interrupting the processing of the main unit;

(d) notifying the main unit that the option pack is present; and

(e) transmitting identification information from the option pack to the main unit and;

(f) copying one or more applications, as well as drivers associated with the one or more applications, from the option pack to the main unit.

18. The method, as set forth in claim 17, comprising the act of determining whether the main unit has enough power to enable the option pack.

19. The method, as set forth in claim 18, comprising the act of notifying a user as to whether the main unit has enough power to enable the option pack.

20. The method, as set forth in claim 17, comprising the act of determining whether the main unit has enough memory to store the applications and drivers available on the option pack.

21. The method, as set forth in claim 20, comprising the act of notifying a user as to whether the main unit has enough memory to store the applications and drivers available on the option pack.

22. The method, as set forth in claim 17, wherein act (c) comprises the act of interrupting the main unit with one or more detect signals.

23. The method, as set forth in claim 22, wherein the detect signals initiate a timer to allow the detect signals to debounce.

24. An option pack interface comprising:

a memory device comprising a memory data structure configured to store identification data; and

at least one data sector defined within the memory data structure, wherein the at least one data sector comprises one or more applications, as well as drivers associated with the one or more applications, and wherein the one or more applications and drivers are configured to be downloaded from the memory device to a main unit.

25. The option pack interface, as set forth in claim 24, wherein the at least one data sector comprises option pack identification data.

26. The option pack interface, as set forth in claim 24, wherein the at least one data sector comprises driver control information.

27. The option pack interface, as set forth in claim 24, wherein the at least one data sector comprises a driver table.

28. The option pack interface, as set forth in claim 24, wherein the at least one data sector comprises option pack configuration information.

29. The option pack interface, as set forth in claim 28, wherein the option pack configuration information comprises information correlating to battery capacity of the option pack.

30. The option pack interface, as set forth in claim 24, wherein the at least one data sector comprises a bootstrap program.

31. The option pack interface, as set forth in claim 24, wherein the at least one data sector comprises original equipment manufacturer (OEM) information.